Nutrition Education

Report of a Working Party

British Nutrition Foundation
Department of Health and Social Security
Health Education Council

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WORKING PARTY ON NUTRITION EDUCATION

Membership

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J. B. Sharp (from July 1975)
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FOREWORD

In the past half-century, poverty, the war, and a period of relative affluence have each in their own way emphasized the importance for health of what we eat. The more we study the relationship between food and health, the more important we realise it to be. So too, are the means by which individuals acquire nutritional knowledge and the part which this information along with other factors plays in determining what is eaten.

The appearance of this report is timely. I attach great importance to the whole subject of prevention and health, within which nutrition and nutrition education play a significant part. This report deals primarily with organisational matters. It is my intention as part of the series following the publication last year of "Prevention and Health – Everybody's Business" to publish a paper on diet and health the purpose of which will be to discuss the effect of diet both in promoting health and in helping to avoid disease. The two papers will, I hope, prove complementary.

As this report makes clear, the review of nutrition education undertaken by the Working Party has been in the nature of a preliminary study and the recommendations made on the strength of it are, for the most part, of a general character. Many bodies have responsibility for different aspects of the subject and it will be for them to give detailed thought to what is said in the report.

I am grateful to the members of the Working Party for their work.

DAVID ENNALS
Secretary of State for Social Services

1. INTRODUCTION

1.1 Terms of reference

The Working Party was established as a result of a speech by the Right Honourable Sir Keith Joseph, M.P., then Secretary of State for Social Services, at the Annual Luncheon of the British Nutrition Foundation on 27 November 1973. He proposed that the Department of Health and Social Security and the British Nutrition Foundation should jointly examine the state of nutrition education in the country* and consider ways and means by which it might be furthered and improved. As a result the Working Party was set up and included representatives of the British Nutrition Foundation, the Department of Health and Social Security and the Health Education Council.

1.2 Purpose of the report

We have regarded our task as that of surveying the means by which nutritional guidance is obtained (a) by the community and (b) by those directly and indirectly concerned with nutrition education. We have tried to identify the gaps and omissions in present arrangements and thence to suggest ways in which these might be improved. In view of the membership this report is only a preliminary survey and not a detailed discussion, and it will be for others to consider the subject further and to act on the recommendations we have made. Inevitably some of these recommendations have implications for public expenditure and we recognise that account of this will have to be taken by those considering them. In common with many preventive measures certain of the costs would be more than offset by savings elsewhere.

1.3 Conference on nutrition education

To further our discussion, a one-day conference on nutrition education was held on 26 June 1975. The conference was of considerable assistance to us in pursuing our task. The participants at the conference are listed at APPENDIX A, and a summary of the proceedings is at APPENDIX B.

*The Department of Health and Social Security was the only government department represented on the Working Party. Technically, therefore, this report applies to England only. However, many of the conclusions and recommendations are applicable more widely throughout the United Kingdom.

2. NUTRITION EDUCATION AND PRACTICE

2.1 Definition of Nutrition

2.1.1 Nutrition is the study of food* and nutrients and of their relationship to health. Food and nutrients are necessary for the growth, maturation and reproduction of all plants and animals. Nutrition includes the study of what these nutrients are; how much of them is needed; what happens to them when ingested and the effects of over-supply and of deficiency. In its broadest aspect, nutrition also takes account of factors such as culture, religion and psychology, which may influence the development of group and individual habits[1]

2.1.2 The study of nutrition extends to all aspects of food production through the various stages of food processing – storage, distribution and cooking – and also to how food resources can best be utilized in all circumstances and especially when changes in the economic and social environment alter the range of foods available to the housewife or caterer.

2.2 The acquisition of nutritional knowledge

2.2.1 Education includes the acquisition and imparting of knowledge. The aim of nutrition education is to provide people, particularly those who have the responsibility of feeding others or advising them about nutrition, with sufficient knowledge to equip them to take appropriate action for the maintenance of good health.

2.2.2 It would be naive to assume that nutrition education can be the primary determinant of the nutritional status of the population because knowledge does not necessarily motivate towards a change in behaviour even though such a change might be beneficial. Action depends not only on knowledge and attitude, but also on the options available in practice – a man cannot wash his hands, however well motivated, without water. Little is known about the relationship between the dissemination of information and its practical effectiveness in promoting health. More information is needed about this subject.

2.3 The transmission of nutritional knowledge

2.3.1 Nutrition education can be:

(a) *general* – an understanding of the basic principles of nutrition and of the particular requirements of people at various stages of life from infancy to old age, particularly in the light of changing circumstances, both economic and social. However, nutrition is such a broad subject *(section 2.1)* that it is neither possible nor necessary for all those requiring nutrition education to have full information about every aspect.

(b) *specialized* – to meet particular nutritional problems, for example, of a different cultural background or of some medical condition.

2.3.2 General and specialized nutrition education are not necessarily mutually exclusive. For example, the knowledge of nutrition learnt by a diabetic person will involve some general principles which may be passed on to the rest of the family and other members of the community. We are mainly concerned with general nutrition education.

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*"Food" in the sense in which the word is used in this report means "food and drink".

2.3.3 Nutrition education for all sections of the community can be achieved by a combination of several or all of the following:

(a) *example* – which foods are offered and how they are prepared, whether at home or at work;
(b) *information* read, seen or heard in the home, school or in any place of learning, including information provided through the media;*
(c) *advice* from doctors and other health-care workers.

The importance attached to each method depends on the particular group or individual to which nutrition education is directed. For most people nutritional knowledge and practice are chiefly affected by what is done at home, what has been learned as a child and by scattered information obtained from articles in the media. The transfer of information appears to be somewhat haphazard.

2.3.4 There are occasions when nutrition education may be appropriate so that standards of nutritional knowledge and understanding may be improved and there are many different groups within the population, each of which has its own particular needs. Nutrition education appropriate to such groups and occasions may be by formal or informal methods, or both.

*"Media" in this report means magazines, newspapers, radio and television.

3. TO WHOM NUTRITION EDUCATION SHOULD BE DIRECTED

3.1 General

Nutrition education should be directed towards all those who in the course of their work impart nutritional information either directly or indirectly. There are five main groups who between them probably have the greatest, or greatest potential, influence on the nutrition of the rest of the community, either by the example they set or by the information they provide. They are therefore the groups who are themselves most in need of nutrition education. They are:

(a) Housewives*

(b) Caterers

(c) Food manufacturers

(d) Professional health-care workers

(e) Teachers

We briefly discuss each of them in order to determine their part in furthering nutrition education; how they get their information, and how their education may be improved.

3.2 Housewives

3.2.1 To enable the housewife to carry out the task of feeding people to their best advantage, she should have a working knowledge of the nutritional requirements of the human body at all stages in life, and of the nutritional value of foods. In carrying out the task of buying, preparing, cooking and presenting food for the family she can achieve the double aim of seeing that the family is properly fed, so going some way towards ensuring good health, and by her example enabling the children to learn the value of food and the need for healthy eating habits at an early age. This desirable benefit should remain with the children for the rest of their lives.

3.2.2 A report on a survey of housewives' attitudes and knowledge of nutrition was published by the British Nutrition Foundation in September 1973.[2] In its conclusion it was suggested that, since 1969, when a similar survey[3] was conducted, housewives have become rather more knowledgeable on the subject of nutrition and diet, although there was still considerable room for improvement.

3.2.3 Apart from knowledge acquired in childhood, information about nutrition is obtained largely through articles in the media, (particularly women's magazines, TV and radio) and through talks arranged by women's organizations and the advice and guidance of health-care workers with whom the housewife comes into contact. The quality of the information provided can be very varied; this is more fully discussed in *sections 3.4 and 3.5*.

3.2.4 To strengthen the sources of nutrition information mentioned in *para. 3.2.3* we think more could usefully be done by way of special classes, including evening classes, in schools and other educational establishments; instruction during pregnancy, at antenatal clinics and elsewhere; classes in parentcraft for both parents; postnatally at child health clinics; and instruction during routine visits by health visitors to the mothers of young children in their own homes.

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*"Housewife" in this report means the person who takes the responsibility for meals and who prepares the food in the home. This responsibility may be the province of one or more persons.

3.3 Caterers

3.3.1 Caterers have a considerable influence on the eating habits of much of the population by the example they set in their choice of menus and standard of cooking. The caterer has the opportunity of demonstrating how good nutrition can be put into practice.

3.3.2 The kinds of meal provided by caterers are determined by the setting in which they work. Although the quality and success of the meal provided is ultimately dependent on the skills and responsibility of the individual caterer, many of the public services* are provided with guidelines by the relevant government departments, such as those[5] concerning the nutritional content of meals in the school catering service to assist in the planning of meals. Central guidance is not appropriate for hotel, restaurant or industrial catering where the demands of the consumer may take first place. Despite the widespread misconception to the contrary, there need be no conflict between commercial interests and sound nutrition.

3.3.3 There is a need for adequate pre-service and in-service training of catering staff. Arrangements are made for such training in the public services. These arrangements can vary widely and we have not examined them in detail. As an example of how the need for training can be met there are the national training schemes for caterers in the National Health Service. In-service training courses include nutrition, particularly as it applies to the health service, and National Health Service dietitians play a part in reinforcing in practice the nutrition taught in theory.

3.3.4 Despite the various training arrangements and guidance given, it is a common observation that poor catering practices occur, such as overcooking and prolonged hot storage which reduce the nutritional value of food. It is very important therefore not only that pre-service and in-service courses should provide caterers with a knowledge of nutrition, but also that caterers should know how to apply this knowledge.

3.4 Food manufacturers

3.4.1 Food and drink account for about 30% of consumer expenditure in the U.K. and of this expenditure only about a quarter is on fresh food, the remaining three quarters being on food or drink processed in some degree. Responsibility for providing wholesome processed food is mainly the province of the food manufacturer.

3.4.2 The food industry is also an important source of nutritional information for the public. Some companies employ nutritionists in their public relations departments to provide advice to enquirers and to produce audio-visual material for teaching purposes. It is important that food producers be kept up-to-date with all major advances in nutritional knowledge, not only those which directly affect their specialist interests, so that they present the facts fairly and in perspective.

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*Some local authority establishments such as children's and old people's homes may be too small to have a catering service. In these circumstances the housemother or cook will have a similar understanding of nutrition to the housewife (*section 3.2*). Meals-on-wheels may be supplied from a variety of kitchens including those of hospitals, schools and residential homes or from special kitchens staffed by voluntary organizations such as the Women's Royal Voluntary Service. The Catering and Dietetic Branch of the Department of Health and Social Security issues booklets 4, 20 for the guidance of those who prepare such meals.

3.4.3 Food manufacturers also have a powerful means of influencing public tastes and understanding of nutrition through the labelling and advertising of foods. The *Labelling of Food Regulations 1970* and subsequent amendments[6] require that pre-packed food be labelled with a name or description which accurately describes the food; that, except for a few foods, there be a list of ingredients which must normally be shown in descending order of quantity; and the name and address of someone responsible for the food must be shown. The Regulations also lay down the circumstances in which a claim may be made about the energy content, the presence of specific nutrients or a food's suitability for people with certain metabolic disorders, e.g. diabetes. Where a claim is made, certain nutritional information about the food must appear on the label, in a prescribed manner. Even these regulations leave room for varied interpretations.

3.4.4 The question of nutritional labelling is currently being reviewed by the Food Standards Committee.* Food labelling is a controversial subject which we do not discuss fully here as there is no evidence with which to assess the effects of labelling on nutrition education. We do, however, suggest that the energy value of food products be shown on the label, since this information is not only in demand but would also be meaningful to the general public because of the wide appreciation of the risks to health associated with obesity and the wide publicity about slimming.

3.4.5 There are both statutory and non-statutory controls on advertising. Although individual advertisements are controlled for content and impression[7] there is an overall imbalance in the nutritional information presented. For example, there is very little advertising of fresh fruit and vegetables whereas there is considerable publicity for certain snacks which provide little in the way of nutritional value except energy.

3.5 Professional health-care workers

3.5.1 These include dentists, dietitians, doctors, nurses – especially health visitors and midwives – and those specifically in charge of health education. They may all act in an advisory capacity to both the sick and the healthy.

3.5.2 It is clearly important that the advice given by workers in the health professions is both as accurate and as consistent as possible. Although it is impossible to expect all health-care workers to give identical advice on all aspects of the subject, it is important that where opinions differ these differences should be seen to be due to the present inadequacy of knowledge. The basic training of all health-care workers should include the study of nutrition and they should also be kept up-to-date with advances in nutritional knowledge. In some training establishments, nutritional aspects of physiology or medicine are included as part of the general course. Nutrition is rarely given emphasis as a discipline. Nutritional instruction (except for dietitians) is in our view frequently inadequate.

*The Food Standards Committee advises the Minister of Agriculture, Fisheries and Food, the Secretary of State for Social Services, the Secretary of State for Scotland and the Head of the Department of Health and Social Services for Northern Ireland on the exercise of their powers, under the Food and Drugs Act 1955 and the corresponding enactments relating to Scotland and Northern Ireland, to control the composition and description of food.

3.5.3 Other bodies have made recommendations concerning the teaching of nutrition in the education of medical undergraduates and postgraduates in Schools of Medicine all over the world. Accordingly we have not attempted to examine this aspect in detail. We reprint those of the International Union of Nutritional Sciences (IUNS) Committee on Nutrition Education in Medical Faculties here:

1. That the physiological and biochemical basis of nutrition is taught in the preclinical years.

2. That the pathology and therapy of nutritionally induced disease is taught in the clinical years.

3. That the public health and community medicine aspects of nutrition should be an integral component of the medical curriculum.

4. That clinical nutrition and preventive or therapeutic dietetics are presented to the medical student in such a manner that he can make use of this knowledge in medical practice.

5. That active efforts are made to support postgraduate education which would keep the practising physician informed of advances in nutritional knowledge and would also provide information of a more specialized kind, e.g. in the form of symposia or courses on nutritional problems in their own country or on nutritional medical practice in developing or tropical countries.

6. That a Medical School should place authority in an individual or committee, or preferably found a Chair of Nutrition, with responsibility to propose an integrated and full teaching programme in nutrition, which would cover the efforts of various departments.

7. Since the recommendations cited above are necessarily of a long-term nature and since they are unlikely to be implemented fully in the near future, despite their urgency and desirability the Committee urges the Council of the IUNS to take measures which would be in partial fulfilment of our aims.

These principles are also appropriate to the other health professions.

3.6 Schools and other educational establishments

3.6.1 In *section 3.1* we identified teachers as one of the key groups with influence in imparting nutrition education. The role of teachers is only one part of the total contribution to nutrition education made by schools and other educational establishments.

3.6.2 The importance of teaching children good habits at an early age is widely recognized. Nutrition can be taught in two distinct ways in schools:

(a) food and nutrition can be included in a number of subjects, particularly in the biological sciences and home economics, and they can also be themes for projects. The needs of boys for nutrition education should not be overlooked, particularly in view of the popularity of self-catering arrangements. We support a view published in the recent report *"Nutrition in Schools"*[9]*:*

> "We welcome the moves that are being made to bring the school catering service into closer working relationships with home economics departments in schools. We commend curricular links of this nature as a promising way of creating an awareness of healthy eating habits as an enjoyable and satisfying aspect of the art of living."

(b) nutrition can also be taught by the example of school meals. In the recent report on *"Catering in Schools"*,[10] the role of school meals in nutrition education was also discussed.*

3.6.3 It is not the function of the Department of Education and Science to make recommendations concerning the contents of syllabuses in schools and other educational establishments. Responsibility for the syllabus rests by law with the local education authorities and, in some voluntary schools, with the school governors or managers. In practice the responsibility is usually delegated to the head teachers.

3.6.4 H.M. Inspectors, particularly those concerned with home economics and health education, take an active interest in nutrition education. Their chief functions are to monitor educational standards and developments and to report to, and advise, the Secretary of State for Education and Science. They also contribute to the improvement of the work they are called upon to inspect and participate in the activities of the Schools Council as assessors on its various subject committees.

3.6.5 The Schools Council for the Curriculum and Examinations is an independent body funded jointly by the Department of Education and Science and local education authorities. The Council has as its object the promotion of education by carrying out research into and keeping under review the curricula, teaching methods and examinations in schools and, in other ways, the Council helps teachers decide what to teach and how to teach it. Food and nutrition feature in some Council projects,[11,12] and also in some of the Nuffield science projects. At local level the professional advisers of local education authorities and teachers in schools and teachers' centres are involved in the development of the curriculum.

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*". . . learning how to eat in company with others, civilised standards of behaviour when doing so, becoming acquainted with a wider range of food, knowing about balanced meals, including sensible decisions on preferences, all these form an important part of education in a wide sense, serve to establish good eating habits and generally help the physical and social development of the individual pupil in a way which should be to his lasting benefit and that of the community of which he is a part. This practical education in the art of taking meals together should form a powerful reinforcement to the food and nutrition education received by the pupils in the classroom. In turn the classroom education should exert a valuable influence on pupils' approach to school and other meals." *("Catering in Schools"*[10] para. 27 page 14).

3.6.6 It is also important that a good example be set by schools in all other aspects of school life, for example in school tuckshops or vending machines. These can provide a service in the case of children who come to school without breakfast or stay late for school activities. However, many of the goods sold in tuckshops, e.g. savoury snacks and sugary confectionery, are prejudicial to good eating habits. These and other associated matters were brought to the attention of Principal School Medical Officers and Principal School Dental Officers in a circular letter issued in 1973 by the Chief Medical Officer and Chief Dental Officer.

3.6.7 If children are to be taught nutrition correctly, their teachers must have some training in nutrition. The content of courses for the training of teachers is a matter for the training establishments and the bodies validating the courses, but the Department of Education and Science offers guidance on the subjects in which there are shortages of staff in the schools and to which, therefore, priority should be given in recruitment to training.

3.6.8 Courses that include aspects of nutrition are available for students who intend to specialize in the teaching of home economics. Since there has been a shortage of such teachers in secondary schools, training institutions have for several years been asked to give priority to the recruitment of students to these courses. Information from the latest survey of staffing in secondary schools indicates, however, that the shortage has decreased markedly in 1976. There are other specialist subject areas which also include a study of some aspect of nutrition. The structure and content of such courses are not matters in which the Department of Education and Science intervenes directly.

3.6.9 Courses that include the subject of nutrition for qualified teachers are organized by the Department of Education and Science and are run by H.M. Inspectors. Attendance at these courses is voluntary. It would seem that only the keenest teachers attend them whereas the teachers who are probably most in need of further education are often those who do not seek it. Present financial restrictions within local education authorities add to the difficulties of supporting teachers on these courses.

3.7 Special groups with particular needs

There are special groups of people who have nutritional problems requiring particular attention and whose needs are not met by the general education of the majority of the population. These include, for example, the elderly, infants, and one-parent families. Some of the problems which are of particular importance to these groups of the population were discussed at the one-day conference on nutrition education, a record of which is at APPENDIX B. Some current nutrition problems have been dealt with in more detail by published reports; these are cited in the references.

4. ORGANIZATIONS PROVIDING NUTRITIONAL INFORMATION

4.1 General

Certain Government departments and other organizations either have, or might be expected to have, a *direct* responsibility for nutrition education. Their roles are discussed below:

4.2 Department of Education and Science

A distinctive feature of the public education service in England and Wales is the devolution of administration to local authorities and schools. The Department of Education and Science has not sought to control the school curriculum in detail (*para. 3.6.3*). It does, however, encourage the development of forward-looking courses in all subjects through H.M. Inspectors, in their contacts with schools and colleges, and through its publications and short courses. Nutrition and food education have been included in these programmes. The Department's Handbook of Health Education[13] written for teachers and student teachers, contains material on nutrition and food. The Department's catering advisers are in constant contact with school meal organizers and other local education authority officials. They are available to give advice on both the nutritional and organizational aspects of school meals.

4.3 Department of Health and Social Security

4.3.1 The Department of Health and Social Security has responsibility for the public health, including responsibility for surveillance of the nutritional status of the nation. Work on nutrition is undertaken in association with the Committee on Medical Aspects of Food Policy. The Committee advises the Chief Medical Officer of the Department on all matters relating to nutrition and to food policy and among its members includes experts in the subjects of nutrition, biochemistry and various specialties of medicine. The Committee, through the Chief Medical Officer, advises other Government Departments and the Food Standards Committee on a wide range of nutritional matters.[14,15]

4.3.2 The Department has published reports that are relevant to nutrition education. Recent publications include: "Diet and Coronary Heart Disease" (1974),[16] "Present-day Practice in Infant Feeding" (1974),[17] "Vitamin D Deficiency and Osteomalacia" (1977).[18] Reports such as these are brought to the notice of Area Medical Officers and community physicians, dietitians, general practitioners, health education officers and the nursing profession. Press statements are made by the Department and enquiries from the public are answered.

4.3.3 The work of the Catering and Dietetic Branch of the Department is not confined to the National Health Service but extends into social services and other organizations. Publications which are intended to increase good catering practice, with relevant nutritional information, are issued by the Branch. Recent publications include "Nutrition and Modified Diets",[19] "Catering in Homes for the Elderly",[4] and "Catering in Community Homes".[20] These are distributed within the National Health Service and social services and are available to colleges where catering and dietetics are taught. The Catering and Dietetic Branch is directly involved with the in-service training courses for National Health Service catering managers and trainee cooks (*section 3.3*).

4.4 Ministry of Agriculture, Fisheries and Food

4.4.1 The Ministry of Agriculture, Fisheries and Food is responsible for ensuring that enough food of good quality is available at a reasonable price for all sections of the population. The nutritional quality of this food, both raw and processed, is promoted by research and legislation, such as the compulsory addition of nutrients to most flour and margarine. The Ministry monitors food supplies derived from agriculture in Britain and from imports and, by means of the National Food Survey,[21] the food bought by the housewife for households which are of different family size, of different incomes and in different parts of Great Britain. In addition the Ministry is administratively responsible for the Food Standards Committee.

4.4.2 During the second world war the introduction of unfamiliar foods and the need to change food habits led to the establishment of a national food advice service, based on the Ministry of Food. This involved a widespread programme of instruction in cookery and of education in nutrition by means of leaflets, posters, lectures and radio talks and extensive advertising in the national press. Though the centre of this effort was at the Ministry of Food, the programme had the cooperation of the Ministries of Health and Education and of many voluntary organizations. After the war the impetus for a national programme of nutrition education was lost. Nevertheless, the Ministry of Agriculture, Fisheries and Food continues to publish the "Manual of Nutrition"[22] which not only forms the core of many school and college nutrition courses but is also useful to lay people and universities.

4.5 Department of Prices and Consumer Protection

4.5.1 The Department has responsibility for the retail price of food and issues a weekly news release on the current retail prices of fresh foods. This publication provides information that enables the housewife to choose a wise diet as cheaply as possible. This is not intended as nutritional information but to assist the housewife in her purchases.

4.6 Health Education Council

4.6.1 The Health Education Council is a government-sponsored body with a responsibility to carry out national education campaigns on topics related to health, and to provide support through materials and other means for activities at a local level. Campaigns that have received priority recently have been the campaign against smoking, and the campaign for family planning. In addition, the Council promotes training in health education and supports a diverse research programme. With specific reference to nutrition, the Council has in the past arranged study days on diet and various aspects of health, and is currently funding a pilot project at the University of Surrey to identify gaps in public knowledge of nutrition.

4.6.2 The wide variety of leaflets produced by the Council includes such topics as breast feeding, bottle feeding, and weaning; while leaflets designed for expectant mothers and the elderly also include guidance on nutritional matters.

4.6.3 The Council's information and library service offers support to those who wish to undertake health education on nutrition.

4.7 Area Health Authorities

4.7.1 Each Area Health Authority has an Area Medical Officer who is responsible for drawing up health education programmes as part of the preventive health services. Some two-thirds of Area Health Authorities to date have appointed an Area Health Education Officer who has executive responsibility for health education including the provision of information, advice and educational material for use by doctors, dentists, midwives, nurses, health visitors, pharmacists, chiropodists and others.

4.7.2 One of the duties of the Area Health Authority[23] is to establish close working relationships with local authorities and the Health Education Council.

4.7.3 Health education is given in schools and colleges and is also provided for expectant mothers and parents of young children in a wide range of clinics. It is the responsibility of the Area Health Authority to provide advice and expert help in health education and the provision of audio-visual materials and to arrange local campaigns, lectures and displays and to produce and distribute publicity material.

4.7.4 District Management Teams have been recommended to appoint District Dietitians to advise them on, and to manage, the nutrition and dietetic service for each health district.[24] Until quite recently most dietitians worked in hospitals, though a few were engaged in community health work. The new concept of a district service coordinates community and hospital services, emphasizing both normal nutrition and therapy. District Dietitions and their staff work with Health Education Officers to produce information and teaching aids for use in nutrition education. Where District Dietitians have been appointed they are also available on request as advisers to local authority social services departments, education authorities and other bodies.

4.8 The British Nutrition Foundation

4.8.1 The British Nutrition Foundation was established in 1967 by a group of prominent members of the food industry, and a number of distinguished scientists and medical men, all of whom recognized the need for an authority on nutritional matters which was independent both of commerce and of government. The Foundation, although financed by the food industry, is a registered charity with the function of giving impartial advice on nutrition. It sets out to promote education and research in nutrition and related matters, and to provide authoritative information and comment about nutrition in all its aspects.

4.8.2 The main effort in information and education has been through the sponsoring of conferences and the publication of their proceedings; the promotion of meetings for the discussion of topics of current concern; contacts with the media; publication of a regular *Nutrition Bulletin;* and leaflets published in association with other organizations, such as the British Dietetic Association and the Health Education Council.

4.8.3 Council meetings of the Foundation provide an important forum at which industrialists, academic scientists and government scientists discuss nutritional matters. Nutrition is a multi-disciplinary subject and diverse organizations have interests in it. The Foundation endeavours to maintain good links with all of these.

4.9 Establishments of higher education

4.9.1 Nutrition is taught in a number of universities and polytechnics throughout the United Kingdom. At the present time nutrition may be studied either as a first degree or as a postgraduate subject. Universities are therefore an important source of fully trained nutritionists.

4.9.2 As with many other subjects, a first degree in nutrition is not a vocational qualification. Employment opportunities are limited unless additional qualifications are taken, such as teaching or dietetics. For those who have added a postgraduate qualification in nutrition to a first qualification in, for example, biochemistry, food science, or medicine, there may be additional opportunities for employment (for example within the food industry or the health professions).

4.9.3 Some university departments of nutrition are already concerned with the problems of nutrition education both in their research and teaching, as are some polytechnics and other educational establishments.

4.10 Other sources of information

4.10.1 **The media**

The press, television and radio play a large part in informing and, indirectly, in educating the public by:

(a) *reporting on newsworthy topics,* such as the publication of reports and new discoveries in research. The news media seem to favour controversial material in order to make articles newsworthy and of interest. The standard and kind of articles in the media depend on the material available; the integrity and skill of both the interviewer and the person interviwed; and the newsworthiness of the subject. It is all too easy, by this method of presentation, for scientists and others to appear to be contradicting each other, and for differences of opinion to be exaggerated. This can result in confusion of the public because there is apparently no uniform body of opinion.

(b) *special feature articles* on particular aspects of food and nutrition, e.g. articles on slimming and family budgeting in women's magazines and in magazine programmes on radio and day-time television. In our experience these sections of the media are usually anxious to present well-informed and balanced articles and, in order to do this, they need the cooperation of those with the relevant knowledge.

(c) *specifically educational programmes,* e.g. schools broadcasts, documentary programmes, professional journals. Research for schools broadcasts and other educational programmes is usually thorough and the material well presented. Schools programmes are a useful means of providing modern knowledge which is independent of the skill and inclination of the schoolteacher.

(d) *the relevant professional journals* provide a means of updating and supplementing the knowledge of individual members of professional or trade associations. Exhibitions and seminars may also be sponsored by these journals. We welcome every effort that is made to put across nutrition information that is relevant to the interests of the reader.

A full report on the subject of *"Science and the media"* has been published by the British Association for the Advancement of Science.[25]

4.10.2 **Sources of teaching aids**

(a) New books and other teaching aids are also necessary in order to keep pace with advances in modern knowledge of nutrition. Teaching aids for use in schools are usually provided by local education authorities, but the present economic stringency has adversely affected this service.

(b) The standard of educational aids currently published by firms and organizations which specialize in educational aids is usually very high and there is a considerable amount of material available on a wide variety of subjects, but both the information and its source are often hard to locate because there is no central point of reference. Although the British Nutrition Foundation and the Health Education Council provide points of contact with the main sources of audio-visual material, neither claims to be comprehensive nor imposes a set standard on the quality of the teaching material made available to them.

(c) A number of commercial firms (e.g. in the food industry) produce free or cheap audio-visual aids for use in schools and clinics. The British Nutrition Foundation held an exhibition of these aids in 1973 at which they circulated a questionnaire.[26] The majority of the respondents – health education officers, lecturers, teachers and dietitians – said that they would like new visual aids developed which do not have a commercial bias. They wanted an integrated and consistent series of aids on different aspects of nutrition for different age groups, using all media.

(d) The demand for unbiased material (i.e. aids that do not advertise a product) is particularly strong from health-care workers. Several Area Health Authorities have had to produce their own audio-visual material because of a failure to find suitable published material. We consider that the nutritional information in some of these aids and in some of those of the food industry leaves much to be desired.

4.10.3 **Societies and professional bodies**

The British Dietetic Association, the Institute of Health Education and The Royal Society for the Promotion of Health are also concerned with the promotion of nutrition education. The latter has for many years organized courses for their certificate and diploma examinations in nutrition for caterers. Such societies provide opportunities for conferences, courses and lectures about nutrition. Their help and support should be enlisted in any national effort to promote nutrition education.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 General

5.1.1 Because nutrition is such a wide-ranging subject, many are interested in nutrition education but few will take responsibility for it. This is a major weakness and accounts for much of the confusion, apparent contradictions and omissions in the present system of passing on nutritional knowledge in a practical form. The general public lacks sufficient knowledge to put into perspective the variety of information on food and nutrition presented by the health professions, the media and the food industry. The standard of information is very variable and the means for the dissemination of good information are inadequate at present.

5.1.2 Although we have briefly discussed how nutritional knowledge may be acquired and transmitted (*sections 2.2 and 2.3*), little is known about the impact of information on attitude and behaviour in health education. We *recommend* that further research should be undertaken on the relationship between the dissemination of nutritional information and its reception and application. Such studies might perhaps be undertaken by the Health Education Council which already evaluates some of its health education programmes.

5.1.3 In *chapters 3 and 4* we have described how nutrition information is transmitted at present. This has led us to make the recommendations which are set out below. As we have already emphasized, this report is only a preliminary survey and it would therefore not be appropriate to make detailed recommendations.

5.2 The catering profession:

Sound nutritional principles need not conflict with the application of catering skills. Rather, catering skills should be employed to their best advantage in order to produce meals that are palatable and suited to the nutritional needs of the consumer (*para. 3.3.2*). We *recommend* that the application of nutritional knowledge should be extended to all training programmes (*paras. 3.3.3 and 3.3.4*). We also *recommend* that comprehensive arrangements for pre-service and in-service training should be implemented in all branches of public catering. The implementation of such arrangements should be the aim for all caterers. Coupled with this we feel the need for the central bodies, who are concerned with providing guidelines on meal preparation and catering, to review these constantly and to consider the scope for further guidelines on how good nutrition can be put into practice (*para. 3.3.2*).

5.3 Food manufacturers:

Food manufacturers and their advertising agents influence eating habits and the intake of nutrients. The nutritional information provided by the food industry is variable. Some is excellent, but sometimes it is inconsistent with current medical and nutritional opinion (*paras. 3.4.2 – 3.4.5*). The British Nutrition Foundation, because of its links with industry, is able to play an important part in guiding the interpretation of advances in nutritional knowledge, particularly as they affect the information provided for the public by the food industry. We consider that there is scope for giving more guidance of this kind.

5.4 The health-care professions

5.4.1 The general public looks to the health professions for advice on nutrition. Thus the health professions need to be suitably equipped for teaching and giving such advice *(para. 3.5.2.)*. Responsibility for the standards expected for professional qualifications lies with the relevant examining boards and the professional councils or associations.

5.4.2 We support the recommendations made by the Committee of the International Union of Nutritional Sciences[8] as regards the medical profession *(para. 3.5.3)* and we *recommend* that these aims and principles should be applied as widely as necessary by the bodies concerned. In our opinion, much could be done to improve the status of nutrition and its teaching if medical schools were to have a full teaching programme in nutrition which would integrate the efforts of various departments.

We also *recommend* that the present system of "updating courses" and in-service training for dentists, doctors and nurses, especially health visitors and midwives, should include courses in nutrition.

5.4.3 We welcome the extension of the nutrition and dietetic service and the health education service which has already been initiated by Area Health Authorities but which has not yet been fulfilled because of financial stringency (*para. 4.7.1*). We *recommend* that more emphasis should be placed on nutrition as a component of health education, where appropriate, for example in antenatal, child health, dental and obesity clinics, parentcraft classes and school health education programmes (*para. 4.7.3*).

5.5 Schools and other educational establishments

5.5.1 Nutrition can be taught in the classroom and by example of school meals. We welcome and commend the promotion of close cooperation between the school catering service and home economics departments in schools (*para. 3.6.2*).

5.5.2 In order to provide the best nutrition education in schools it is clearly desirable that teachers, particularly of home economics and the biological sciences, should be properly equipped (*paras. 3.6.7. – 3.6.9*). We therefore *recommend* that instruction should be provided by those whose qualifications include a degree course or its equivalent in nutrition.

5.5.3 The facilities for higher education in nutrition are probably adequate to meet current demands for trained nutritionists. However, implementation of the Working Party's recommendations would lead to more demands in the future for teachers whose qualifications include nutrition.

5.5.4 To the extent that there is any increase in higher education facilities, we *recommend* that the emphasis should be towards postgraduate courses in nutrition because of the greater opportunities for those with postgraduate qualifications in a wider variety of employment (*paras. 4.9.2 and 4.9.3*).

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*Central Midwives Board
Council for Education and Training of Health Visitors
Council for Professions Supplementary to Medicine (Dietitians Board)
General Dental Council
General Medical Council
General Nursing Council

5.6 Other sources of information

5.6.1 Controversy between professional people engaged in research is a necessary part of scientific progress and is usually based on informed and increasing knowledge about the subject under discussion. But these disputes have resulted in confusion to the layman when they have been made public, particularly by news reporters (*para. 4.10.1*). We therefore *recommend* that there should be more reports or guidelines on nutritional matters by authoritative bodies, which should contain practical advice for the public and for professional workers alike. Such reports ought to do much to promote public confidence. (Examples are provided in the references.[16, 17, 18, 27, 28]).

5.6.2 There are a number of professional bodies which are concerned with the promotion of nutrition education. We *recommend* that their help and support should be enlisted in any national effort to promote nutrition education (*para. 4.10.3*).

5.7 Information and advice on nutrition education

5.7.1 Underlying much of what we have said has been the need for those engaged in disseminating information and advice to have access to simple and accurate information on nutrition. The demand for nutrition education will also be much greater in the future because of the increasing emphasis on preventive health measures, changing economic circumstances and changes in the balance of world food supplies.

5.7.2 Our discussions have led us to the conclusion that there is an increasing need for a point of reference for those seeking guidance on the practical application of nutritional principles in the community. The British Nutrition Foundation and the Health Education Council already perform this function to the limit of their present resources. Both provide a nutritional information service and are active in producing, and advising on the production of, audio-visual aids (*sections 4.6 and 4.8*). We *recommend* that this function should be further developed by the appointment of a committee which would bring together the experience and facilities of these two bodies. The committee would be constituted so as to benefit from the additional experience of practising dietitians, teachers, health education officers and the appropriate government departments.

5.7.3 We have in mind a committee whose task, broadly speaking, would be to provide guidance on the practical application of the principles of nutrition established by authoritative reports of the kind referred to in *para. 5.6;* to assist Area Health Authorities, food manufacturers and the media with simple information, and to advise on the production of simple, accurate teaching aids. The Committee would also usefully collaborate with academic institutions and with bodies such as the Schools Council, and bodies responsible for training in the catering, health and teaching professions on matters concerning nutrition.

The committee would be advisory in character and it would be for individual organizations to decide whether or not they wished to consult it.

5.7.4 The servicing of this committee need not itself be very costly. The committee's work should result in a better use of available facilities and resources. It could well, in due course, result in pressure on such bodies as the British Nutrition Foundation and the Health Education Council to spend more on nutrition education than at present.

6. SUMMARY OF MAIN RECOMMENDATIONS

There will be a much greater need and demand for nutrition education in the future because of the increasing emphasis on preventive health measures, changing economic circumstances and changes in the balance of world food supplies. Nutrition education of the community, whether by example or by the provision of information, is not the responsibility of any one group but of several. Although it is not possible to coordinate all the sources of nutritional knowledge, there are means by which gaps in knowledge and conflicts of information could be reduced and the understanding of nutrition improved.

Our main recommendations therefore follow. These are set out in the order they appear in *section 5* except that we have placed first the recommendation appearing at *para. 5.7.2* because we regard it as of prime importance:

(1) There is an urgent need for a point of reference that would provide simple and accurate information on nutrition. The British Nutrition Foundation and the Health Education Council go some way towards meeting this need, but their capacity is limited by present resources. We think that the work of both these bodies would be strengthened by the appointment of a committee constituted so as to benefit from the experience of practising dietitians, health education officers, teachers and the relevant government departments (*paras. 5.7.2 and 5.7.3*). This committee would be expected to help to achieve the other recommendations in this report, either through its own efforts or by liaison with other organisations.

(2) More information is needed about the relationship between the dissemination of information and its reception and application in the promotion of health (*paras. 2.2.2 and 5.1.2*).

(3) All caterers should have a relevant training qualification which includes a thorough grounding in the application of nutritional principles (*paras. 3.3.3, 3.3.4 and 5.2*).

(4) Food manufacturers need guidance for the interpretation of advances in nutritional knowledge so that they present nutritional facts in perspective when providing information for the public (*paras. 3.4.2 – 3.4.5 and 5.3*).

(5) Nutrition should play a more important part in the basic training of the health-care professions. The International Union of Nutritional Sciences has made recommendations to this effect (*para. 3.5.3*). The present system of "updating courses" and in-service training should include courses in nutrition (*para. 5.4.2*).

(6) More emphasis should be placed on nutrition as a component of health instruction where appropriate, as for example in antenatal, child health, dental and obesity clinics, and school health education programmes (*paras. 4.7.3 and 5.4.3*).

(7) Qualified nutritionists should provide instruction both in colleges of education and on in-service training courses for teachers who are required, or may wish, to include nutrition as a subject in their school teaching programmes (*paras. 3.6.7 – 3.6.9 and 5.5.2*).

(8) In order to extend the employment of nutritionists to a wider variety of professions there should be a greater emphasis on postgraduate courses in nutrition (*paras. 4.9.2, 4.9.3, 5.5.3 and 5.5.4*).

(9) There should be more reports or guidelines on nutritional matters by authoritative bodies which should contain simple, practical advice for the general public and professional workers alike (*paras. 5.5.2 and 5.6*).

(10) The help and support of societies and professional bodies which have interests in nutrition education should be enlisted in any national campaign for nutrition education (*paras. 4.10.3 and 5.7*).

(11) Help and advice should be given on the production of teaching aids suitable for nutrition education (*para. 5.7.3*).

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APPENDIX A

LIST OF PERSONS PRESENT AT THE ONE-DAY CONFERENCE HELD ON 26 JUNE 1975

Health Education Council

L. H. Baines, OBE	*Vice-Chairman*
A. C. L. Mackie, CBE, DFC	*Director-General*
Dr. A. J. Dalzell-Ward	*Chief Medical Officer*
Miss J. E. Thomas	*Research Officer*
L. Elliston	*Conference report editor*

British Nutrition Foundation

Prof. Sir Frank Young, FRS	*President*
Miss D. F. Hollingsworth, OBE	*Director-General*
P. M. Victory, OBE, MC	*Secretary*
Miss E. Morse	*Scientific Officer*
Miss B. L. Ewington	*WPNE Minuting Secretary*

Department of Health and Social Security

T. B. Williamson	*Assistant Secretary*
J. B. Sharp	*Assistant Secretary (Designate)*
Dr. S. J. Darke	*Principal Medical Officer*
Dr. A. Yarrow	*Senior Medical Officer and Liaison Officer with the HEC*
Miss P. E. Torrens	*Dietetic Adviser*

Ministry of Agriculture, Fisheries and Food

Dr. D. H. Buss	*Principal Scientific Officer*
Miss J. Robertson	*Principal Scientific Officer*

Department of Education and Science

D. H. Griffiths	*Principal*
Miss M. Rayment	*HMI – Staff Inspector*

Other Bodies

Mrs. F. S. Patton	*Community Dietitian/Camden/Islington Area Health Authority*
Miss M. Sharp	*Health Education Officer, Croydon Area Health Authority*
J. C. McKenzie	*Research for Management, Limited*
Mrs. E. Vittery	*Braban Public Relations Limited*

APPENDIX B

RECORD OF PROCEEDINGS AND SUMMARY OF POINTS MADE AT THE ONE-DAY CONFERENCE ON 26 JUNE 1975

A joint conference organized by the Working Party drawn from the Department of Health and Social Security, the British Nutrition Foundation, and the Health Education Council was held at the Council's offices in London on 26th June, 1975.

Sir Frank Young, President of the Foundation, took the chair and gave the opening address entitled "Should we attempt to initiate, from the public health point of view, dietary changes in Britain?" Mentioning his experience as chairman of the DHSS Advisory Panel on Diet in relation to Cardiovascular and Cerebrovascular Disease, he recalled its conclusions that simply dietary changes could not reduce the likelihood of such disease occurring in an individual; but that to reduce the risk obesity should be avoided, both in children and adults, and that individuals who are overweight should so reduce their food intake in relation to their physical activity that they no longer obese. Consumption of sucrose should, in the view of the majority of the members of the panel, be reduced, if only to diminish the tendency to obesity and its possible consequences. The majority of the members of the panel recommended that the amount of fat in the diet should be reduced, but all agreed that the evidence to support the view that the risk that an individual will get coronary heart disease can be reduced by an increase in the proportion of polyunsaturated fat in the diet was incomplete.

Sir Frank referred to the MAFF National Food Survey report (1970/71) which had reviewed the 5-year period 1966–70 and also the changes in the pattern of food intake in Great Britain during the period 1956–71. The chart illustrating the proportions of total food energy, available to the average household, derived from total carbohydrate showed a fall from about 52% in 1956 to about 48% in 1971; that from fat a rise from nearly 36% in 1956 to about 41.5% in 1971; and that from protein remained close to 11.5% throughout the period. Despite the limitations of the NFS he believed that these trends were real and that the British people were tending to derive a higher proportion of their food energy from fat and less from carbohydrate. Though the DHSS panel had concluded that, to reduce the risk of coronary heart disease, the British people ought to eat less fat, they were, in fact, doing the reverse. The questions for debate were:

How could one educate people to eat less fat for the good of their health?, and

Why were they tending to derive more of their food energy from fat, and less from carbohydrate?

Next, Sir Frank quoted from Miss Hollingsworth's review of changing patterns in British food consumption (*BNF Bulletin* No. 12, 1974), mentioning the sharp rise in world food prices in 1972, when British fat consumption had fallen and that of carbohydrate had risen, reversing the 1956–71 trend. This change was apparent in all the income groups except the highest. Asking whether we ought, from the health aspect, to persuade people to take a higher proportion of their calories in carbohydrate and a smaller one in fat, Sir Frank said that death rates for different diseases classified by incomes of heads of households would be of great interest. His tentative conclusion from the data shown was that income was an important factor in determining the proportions of fat and carbohydrate consumed: the higher the income, the more was energy derived from fat and the less from carbohydrate.

He was sceptical about the alleged epidemic of coronary heart disease related to consumption of fat: the mortality from this condition had been rising, but so had the proportion of ageing people. Diet was not necessarily of limiting importance, and other risk factors – cigarette smoking and lack of exercise – were involved. However, diet was important in prevention and treatment of many conditions – obesity, diabetes, perhaps hypertension, dental caries (sucrose, fluoride) and so on.

But he was particularly concerned today with diet in relation to general health of the nation. With reference to Yudkin's assertion that increasing consumption of refined sucrose was a factor in rising coronary disease mortality, Sir Frank pointed out that consumption had shown a downward trend from about 1960. It was possible that during the next 20 years the problem of feeding the enormously increasing world population might lead the British people to consume more grain products and less animal protein and fat for economic reasons. If this happened, and people in the UK were to take more of their calories from carbohydrate and less from fat he thought that the effects on health and disease rates would be very interesting. There was, however, little evidence as to what levels of fat intake were most desirable. Should we educate in advance to accept such a possible change? The relative ineffectiveness of the anti-cigarette campaign indicated the magnitude of such a task. Perhaps there should be more research into the neural mechanisms which controlled appetite and taste. He concluded that much basic information relevant to public health education in the field of nutrition was not available and that clearly research and education were much needed.

In the ensuing discussion Miss Hollingsworth said that Britain was not the only country where income affected the choice of foods and led to preference for palatable animal foods. Dr. Buss suggested that it was the proportion, not the quantity, of fat that was increasing.

The inclusion of alcohol in the National Food Survey as a source of calories was raised. Dr. Yarrow said that a forthcoming Scottish survey on drinking habits would include the total energy intake from alcoholic drinks.

Mr. Mackie asked if the patterns of coronary disease had been recorded before cigarettes and stress became important factors, to which Sir Frank replied that the pre-1952 statistics were not comparable with 1975.

Amongst several points raised regarding obesity and its control, Dr. Darke mentioned evidence that fat children did not necessarily become fat adults; she estimated that 4–5% of children might be classed as obese. In response to discussion whether or not children were less active than they were formerly, Dr. Dalzell-Ward cited the increase and better quality of physical education and growth of swimming facilities at school.

Is Nutrition Education Important or Necessary?

Miss Elisabeth Morse, presenting her paper under this title, thought that the answer was "Yes, but only in specific circumstances". Much of nutrition education up to now had failed because of mistakes over priorities and emphasis. "Nutrition" involved not just human biochemistry and physiology, but also the study of food in all its context. A multi-disciplinary approach to education on food and nutrition would not only be more meaningful but would also foster more informed and responsible opinion on many related questions, national and international.

There were obvious examples of health problems due to malnutrition – dental caries, overweight, nutritional deficiencies in the elderly and food fad extremists, rickets and osteomalacia amongst immigrants; but these affected only sections in the population, and she was more concerned with the need for general modifications in our eating habits designed to cope with environmental and financial change, which affected food prices, subsidies, scarcities and life-styles. Adaptation to new or less familiar foods might become essential, and habits such as "eating out" or use of convenience foods had already developed greatly, with a consequent decline in cookery skills.

Miss Morse thought that the mass media and speedier communications were presenting the public with conflicting and confusing information about new discoveries, particularly on food and health. This situation was worsened if the scientists contradicted each other, whereas the quacks seemed to offer certainty and comfort.

Asking who should nutrition education be for, and where most profitably applied, she thought that trying to change food habits or improve nutritional status by established teaching methods was useless. For children tempted by sweets or ice-cream a good school tuckshop would do more good than lectures against obesity; or the trade could provide good nutritious snacks. Food habits could change dramatically during a lifetime, and it was turning points and social pressures which gave the necessary willpower, rather than advertising techniques.

Miss Morse felt that it was children themselves who decided what they – and the family – would eat, now that mothers had apparently abdicated authority; this made it the more important that nutrition education should be given in schools and at an early age. School meals could supplement formal teaching. There was scope, she suggested, for some good, simple guidance for teachers to be provided by the Foundation, Health Education Council or the Department of Education and Science.

The food industry should be made more responsible for the nutritional quality of its products, with advertising placing emphasis on variety of ingredients and nutrients, rather than on colour and flavour.

Regarding that receptive group, primiparae, encouragement of correct infant feeding depended on doctors, nurses and health visitors all giving the same advice; she referred to the initiative taken by the Department of Health and Social Security in its report on present-day practice in infant feeding. Although most people would turn to doctors and nurses for advice on nutrition, most of these latter did not know any more about the subject than their patients, so that women's magazines and food firms had much correspondence concerned with explaining dietetic advice given by doctors.

A group which, in her view, seemed unlikely to benefit from nutrition education was the elderly. In the 1972 DHSS survey poor nutrition in the elderly was not significantly related to income: other factors associated with old age all contributed. More home helps, meals-on-wheels and visitors would effect more improvement of nutritional status than education.

Miss Morse concluded with three suggestions.

(i) We should take a fresh look at our audience and ourselves in order to get the whole situation into perspective and to minimize wasted effort.

(ii) Teaching on food and nutrition should be an integral part of life and not a specialized and isolated topic.

(iii) There should be a body for leadership towards proper organization and co-ordination of all nutrition education, both within and between groups, to ensure up-to-date and accurate information. Its role should be guidance, not laying down the law.

There was some discussion over the question whether many children went breakfastless to school. Dr. Darke thought that very few had no breakfast at all, but that the present generation ate more in the evening; and Dr. Dalzell-Ward agreed that there was an altered eating pattern, perhaps grounds for a study of the social history of food.

Mr. McKenzie felt that, in answering Miss Morse's main question, the crux was to decide what specific changes in food choice we wished to achieve. All the evidence we had available shows that it is much easier to change if you have clearer specific objectives rather than vague generalities in mind.

In the course of discussion of the part played in influencing the public's choice of foods by advertising and the media, the point was made that people must be given confidence in forming their own judgements of values and priorities. The words in an advertisement can be controlled but the implications cannot; there is also no control of the balance of advertisements in a programme.

Miss Hollingsworth supported Miss Morse's plea for better nutrition education of doctors and nurses, and mentioned the need to re-emphasize the advantages of breast-feeding.

Relevant Health Educaton Techniques

Mr. L. H. Baines, Vice-Chairman, Health Education Council, took the chair for the afternoon session, and Miss Jane Thomas, Research Officer, Health Education Council, spoke on techniques used in general health education and their application to nutrition in particular.

Miss Thomas posed the basic questions for the planning stage of any educational activity as: What *needs* to be achieved? What *can* be achieved? *How* can it be achieved? What measures are possible to know if it has been achieved?

Basic information obtained in advance could avoid an inappropriate approach, identify previously unrecognized needs and obviate others, pinpoint the most important needs, identify "leverage points" and learning barriers, and furnish the base for realistic objectives and for subsequent evaluation.

Intervention with the purpose of influencing decisions about health-related behaviour called for more than intuition or common-sense, which could be unreliable guides; some psychology was needed to identify accessible "leverage points" in a given situation and to select attainable objectives.

Miss Thomas put forward a schematic representation, equally applicable to nutrition and other health topics, which could be used for identifying those elements in a situation which could be altered and those which could not. As regards nutrition, this representation cited the economic, political, personal, legal and physical factors which affect the availability of foods. The acceptability of foods, once they are available, will depend on a complex interaction between sociological, emotional and sensory factors. At both levels, availability and acceptability, the factors which it is feasible to alter in a given situation can be identified, and key groups or individuals in education of the public might become evident.

She referred to the important role of community dietitians as catalysts in relation to nutritional education, working with the community physician, nursing, social and education services, and also contributing specialist services and research. Health visitors and family doctors should be helped to communicate more effectively with respect to nutrition, being in the forefront as health educators. (At this point she showed a life-span chart illustrating the *modus operandi* of health education for successive age-groups, with the agencies and professionals involved).

Quoting the axiom that response to a message is governed by the ratio between the expected benefit and the energy required to respond, Miss Thomas said that school-children must be interested by being taught what they wanted to learn: teachers should avoid being didactic and try to instil sound nutritional concepts.

Regarding the mass media, their limitations as to nutrition education were that they did not reach all sections of the community; while commercial enterprises had limited effects on attitudes and beliefs and whereas they might cut their effort at a point of diminished returns, the health worker needed total participation and had to market products which by nature were not appealing.

Finally, she hoped that she had made apparent the common problem of developing strategies for effecting change in health and nutrition behaviour. Subsequent discussion dealt with Lewin's "gatekeeper" theory, and who in modern families actually acted as the "gatekeeper".

Mr. Baines asked if the participants could agree on a joint venture, assuming agreement on their objectives.

Miss Hollingsworth wondered if any groups could be excluded. Dr. Buss thought that the elderly needed nutrition education, whilst Miss Morse thought that this group had the knowledge, but not the means or motivation.

It was said that the Department of Health and Social Security was watching over the interests of vulnerable groups, and Dr. Darke observed that poverty was not the main factor in narrowing the choice of foods.

In an exchange of views on evaluation of health education campaigns, Mr. Mackie said that the Health Education Council's smoking-in-pregnancy campaign was known to have been effective; another example was the reception rate for measles vaccination.

Miss Thomas stated that the Health Education Council's budget for research projects included provision for evaluation of all Health Education Council activity, as well as fundamental work on communications and behaviour change in relation to a wide variety of health topics.

Invited Statements

There followed invited statements on the needs and methods adopted in this sphere contributed by representatives of the central departments and of a management research firm. The questions posed were:

(a) What needs to be done?
(b) How should it be done?

For the Department of Health and Social Security, Mr. Williamson said that it was because of the Department's uncertainties on these questions that they sought to set up the present Working Party. They had been greatly helped in

crystallizing their ideas by their association with the British Nutrition Foundation and Health Education Council, and by various expert committees.

They were fairly clear on what needed to be done – to get across the lessons that human milk from breast-feeding was best for babies, that no solids should be added to milk or used at all until babies reached 4–6 months, that bigger was not necessarily better, especially with infants, that vitamin supplements for young children and expectant mothers were important for health, and that some foods (e.g. margarine and oily fish) were better than others as a source of vitamin D and the prevention of rickets. They were also aware of the needs of the aged, especially of the house-bound elderly, and of the importance of preventing obesity because of the higher associated mortality and morbidity. The public should be made aware of the association between dental caries and eating too many sweets and such facts as that meat was not the only source of dietary protein.

On the question how all this was to be done, they looked for expert help to the Health Education Council in how to educate a wide public. Radio and television were perhaps not used enough, and more films should be available made by experts in publicity and nutrition.

Mr. Williamson urged that the machinery of the health services should be used to the full in this field, and that the professional workers with special knowledge and interest should be provided with all educational aids they needed. The messages must be repeated continuously and to each successive generation. Finally, all this had to be done, in present circumstances, with minimum expenditure; but we should be ready with plans for better times.

Speaking for the Department of Education and Science, Miss Rayment, after emphasising that the Department had no statutory powers over the school curriculum, these resting with Local Education Authorities and school governors, explained the national function of the Schools Council for curriculum and examinations, and how developments took place locally. She next gave a comprehensive review of nutrition education and related courses now taking place in middle and secondary schools, and of Nuffield and Schools Council projects with a bearing on food education.

Regarding external examinations, she pointed out that Food and Nutrition was well represented in the syllabuses of the 8 General Certificate of Education and 14 Certificate of Secondary Education Boards, and that further education colleges had many courses with a nutrition component. The Adult Education Service ran courses to meet special needs of immigrants, and the elderly, often in collaboration with the health services. Those within the education service who were concerned with the teaching of nutrition were constantly searching for ways in which learning could be directly related to real needs.

Dr. Buss, speaking for the Ministry of Agriculture, Fisheries and Food, said that his Ministry believed that people should be able to choose their diet from the widest possible range of foods and drinks, allowing for individual differences of opinion or taste. Housewives in Britain might not know much formal nutrition, but tradition – the "meat and two veg." plus cereals and milk – was a good teacher, though some people would say there was now too much emphasis on refined carbohydrates and fats.

However, traditions were weakening and food habits changing towards more reliance on snacks and convenience foods of perhaps less nutritional value than

more traditional products. There was also a greater risk of world food shortages, with different and confusing relative prices; and we might have to replace some imported foods by home-produced ones. One could safely say that people would need guidance to avoid the risk of nutritional imbalance.

As to action, Dr. Buss said that if people deliberately chose inadequate diets this was their right, but if they did so from ignorance they should be helped. The Ministry of Agriculture, Fisheries and Food was exploring the production of more posters and leaflets for housewives and caterers; and the Food Standards Committee additional nutritional information on food labels. Another approach might be to subsidise certain foods, a method found useful in the Second World War. Finally, legislation could ensure basic nutritional standards, should the need be demonstrated, by requiring the addition of nutrients to foods, as now to flour and margarine.

He concluded that to counter any fall in the nutritional value of diets there should be some control of food composition and more public awareness of nutrition. Education should concentrate on the nutritional value of foods, the balance of costs and benefits and the retention of nutrients by good cookery and avoidance of waste.

Mr. McKenzie, in the fourth statement emphasized the need for extending the boundaries of knowledge of this field at the universities, mentioning the "crises of choice" in an affluent society faced with changes in world food supply. The universities could contribute more to professional standards of dietetics; better career patterns for nutritionists and social scientists who wanted to work on behaviour change related to food. He thought that while the problems of influencing food choice had been identified over the past 20 years, little progress had been made in actually effecting change. But opportunities now presented themselves to evaluate and aid the British housewife's ability to adjust to the dramatically changing conditions of 1975; and to do research on the consumer response to innovations such as meat substitutes and their correct usage.

Mr. Baines, introducing the final discussion, said that the Working Party had not yet reported, and would like to receive comments and suggestions.

Participants recalled a number of points from previous discussions, including the avoidance of different people giving different teaching, and emphasis on the vulnerable groups mentioned by Miss Morse.

Dr. Dalzell-Ward said that, if nutrition education was given primarily for reasons of health, there was scanty evidence for advising radical changes in the national diet, though economic and political circumstances might restrict choice of foods.

Mr. McKenzie suggested that the basic philosophy behind nutrition education for the public should be:
- to encourage them to make the most of available food resources;
- to evaluate critically nutritional claims made from any quarter (official or commercial);
- to achieve swift behaviour change if any fundamental problem relating health to diet was detected.

The final discussion reached the conclusion that there was no need to *initiate* changes in the national diet in Britain, but that there was a need for nutrition education in specific areas. The Working Party on Nutrition Education was

requested to consider the means of intensifying education in certain areas. Collaboration in the production of literature was thought desirable, and the WPNE was asked to review what was available from as many sources as possible in order to assess the strengths and weaknesses in this sphere and to take what further action might be required.

Mr. Baines, with the concurrence of the participants, referred the following subjects back to the Working Party for future attention and action, possibly in collaboration with other interested bodies:

1. The encouragement of *breast feeding* of infants, and the discouragement of weaning to solids until 4–6 months of age;

2. Consideration of the need for preventive action in view of the danger of the reappearance of *rickets* in Britain, particularly in the Asian population;

3. Education for the prevention of *obesity* and, where the condition already existed, indication of the hazards and need for weight control;

4. The role of nutrition in the prevention of *dental caries*;

5. The consideration of the special needs for nutrition education amongst the *elderly* – content and methods of dissemination;

6. There was also a general call for unified teaching together with suggestions for expanding communications of information, including greater use of radio and T.V., more attractive literature, especially material for the young and those with learning difficulties, instructive films, greater use of the newly-integrated health services and *nutritional labelling*.

Mr. Baines concluded by expressing special thanks to the presenters of the papers and invited statements.

New director for health education body

By a Staff Reporter

A nutrition expert based in the United States is to become director of the Health Education Council, the quango whose job is to persuade the nation to live a healthier life.

Professor Keith Taylor, aged 56, Professor of Medicine at the University of Stanford, is to take up the job on July 1 at £25,695 a year.

That is understood to be some £5,000 more than the salary of Mr Alastair Mackie, director general for eight years, who is to take an 18-month sabbatical until retirement after disagreements with some council members.

Mr Mackie, admired by journalists for an often abrasive style, was at times less popular with MPs. One campaign depicted a naked pregnant woman and asked "Is it fair to ask your baby to smoke?"

Professor Taylor, born in London, qualified in medicine at Oxford

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